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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,659	09/29/2003	Chun Te Yu	YUCH3041/JJC/JS	8271
23364 7590 03/24/2011 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176			EXAMINER GALL, LLOYD A	
			ART UNIT 3673	PAPER NUMBER
			MAIL DATE 03/24/2011	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/671,659

**Applicant(s)**

YU ET AL.

**Examiner**

Lloyd A. Gall

**Art Unit**

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38, 39, 42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38, 39, 42 and 43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2006 and 02 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference.

As seen in Fig. 1, the CN reference teaches a padlock including a housing having first and second holes facing in the same direction at the top of the housing, a shackle including a root section (at the left side of fig. 1) and a free section at the right side of Fig. 1, the free section disposed outside of the housing and rotatable about the root section between locked and unlocked positions, a confining block having a block portion 4 located outside of the housing in Fig. 1 and a stem portion directly below the block portion located inside the housing in the second, rightmost hole of the housing, the block portion having a receptacle outside of the housing with a first opening defined in the top of the block portion for receiving the free section of the shackle, the block portion together with the stem portion being rotatable with respect to the housing, and cooperable with a locking mechanism 5 disposed in the housing. The CN reference teaches the receptacle of the block portion having a second opening (at the left side as seen in fig. 1), the second opening being in communication with the first opening at the top of the block portion. The second opening of the block portion being rotatable to

allow or prohibit the free section of the shackle from rotation about the root section of the shackle. Fig. 1 of the CN reference does not teach the housing having a notch in a corner thereof for receiving the block portion, and a wall facing the notch. Fig. 4 of the CN 2041340U reference teaches a block portion received within a notch in a corner of the housing, including a wall facing the notch. It would have been obvious to modify Fig. 1 of the CN reference to include a notch in a corner of the housing for receiving the block portion 4, including a wall facing the notch, in view of the teaching of Fig. 4 of the CN reference, to aid in the prevention of tampering with the block portion and free end of the shackle.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference as applied to claim 38 above, and further in view of Lai (672). The CN reference also teaches combination lock wheels 2 at the left side of the housing in Fig. 1. As seen in Fig. 2, Lai teaches a numeral wheel set below the root section 33 of the shackle, including a shaft 34 diagonally opposite to the free section 31 of the shackle, a plurality of inner sleeves 23 mounted around the shaft 34, and a plurality of digit-wheels 24 mounted around the inner sleeves 23. It would have been obvious to modify the combination lock wheels 2 of the CN reference to include a shaft, inner sleeves and digit-wheels, in view of the teaching of Lai, to provide expected locking and unlocking results of the shackle.

Claims 38 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference in view of the Columbia reference.

As seen in Fig. 1, the CN reference teaches a padlock including a housing having first and second holes facing in the same direction at the top of the housing, a shackle including a root section (at the left side of fig. 1) and a free section at the right side of Fig. 1, the free section disposed outside of the housing and rotatable about the root section between locked and unlocked positions, a confining block having a block portion 4 located outside of the housing in Fig. 1 and a stem portion directly below the block portion located inside the housing in the second, rightmost hole of the housing, the block portion having a receptacle outside of the housing with a first opening defined in the top of the block portion for receiving the free section of the shackle, the block portion together with the stem portion being rotatable with respect to the housing, and cooperable with a locking mechanism 5 disposed in the housing. The CN reference teaches the receptacle of the block portion having a second opening (at the left side as seen in fig. 1), the second opening being in communication with the first opening at the top of the block portion. The second opening of the block portion being rotatable to allow or prohibit the free section of the shackle from rotation about the root section of the shackle. Fig. 1 of the CN reference does not teach the housing having a notch in a corner thereof for receiving the block portion, and a wall facing the notch. The Columbia reference teaches a block portion received within a notch in a corner of a housing, and a wall facing the notch, the notch being concaved toward the root section. It would have been obvious to modify Fig. 1 of the CN reference to include a notch in a corner of the housing for receiving the block portion 4, including a wall facing and

concaved toward the root section, in view of the Columbia reference, to aid in the prevention of tampering with the block portion and free end of the shackle.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference in view of the Columbia reference as applied to claim 38 above, and further in view of Lai (672).

The CN reference also teaches combination lock wheels 2 at the left side of the housing in Fig. 1. As seen in Fig. 2, Lai teaches a numeral wheel set below the root section 33 of the shackle, including a shaft 34 diagonally opposite to the free section 31 of the shackle, a plurality of inner sleeves 23 mounted around the shaft 34, and a plurality of digit-wheels 24 mounted around the inner sleeves 23. It would have been obvious to modify the combination lock wheels 2 of the CN reference to include a shaft, inner sleeves and digit-wheels, in view of the teaching of Lai, to provide expected locking and unlocking results of the shackle.

Claims 38, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Columbia reference in view of the CN 2041340U reference.

The Columbia reference teaches a padlock including a housing having a notch in a corner to receive a block portion, a wall facing the notch, The wall being substantially parallel to the root section of the shackle and concaved toward the root section, a confining block having a block portion, and including a receptacle with a first opening in the top of the block portion to cooperate with the free end of the rotatable shackle. In Fig. 1, the CN reference teaches the block portion 4 having a stem extending from a bottom of the block portion and received within an opening of the housing, wherein the

block portion and stem are rotatable together, and a second opening in the side of the block portion, the block portion cooperating with a locking mechanism 5 disposed in the housing. It would have been obvious to modify the Columbia reference such that the block portion thereof includes a stem extending from a bottom of the block portion and is received within an opening of the housing, to be rotatable together with the block portion, and including a second opening in the side of the block portion, and cooperating with a locking mechanism disposed in the housing, in view of the teaching of Fig. 1 of the CN reference, to provide expected locking/unlocking results with the shackle.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Columbia reference in view of the CN 2041340U reference as applied to claim 38 above, and further in view of Lai (672).

The Columbia reference also teaches combination lock wheels within the housing. As seen in Fig. 2, Lai teaches a numeral wheel set below the root section 33 of the shackle, including a shaft 34 diagonally opposite to the free section 31 of the shackle, a plurality of inner sleeves 23 mounted around the shaft 34, and a plurality of digit-wheels 24 mounted around the inner sleeves 23. It would have been obvious to modify the combination lock wheels of the Columbia reference to include a shaft, inner sleeves and digit-wheels, in view of the teaching of Lai, to provide expected locking and unlocking results of the shackle.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference as applied to claim 38 above, and further in view of either Oliver (243) or Taylor (795) or the Design Yu (560) reference.

As seen in Figs. 2 and 3, Oliver teaches a notch 20 parallel to the root section in the fig. 4 position, and concaved toward the root section. As seen in Fig. 10, Taylor teaches a notch 61 parallel to and concaved toward the opposed shackle leg 19 section. Yu (560) teaches a notch at the top, right portion of Fig. 1 having a shape parallel to and concaved toward the opposed shackle leg. It would have been obvious to modify the notch of Fig. 1 of the CN reference as modified by Fig. 4 of the CN reference to include a shape parallel to the root section and concaved toward the root section of the shackle, In view of the teaching of either Oliver or Taylor or Yu, to provide expected results in protecting or allowing rotation of the confining block.

Claims 38 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference in view of Taylor et al (256).

As seen in Fig. 1, the CN reference teaches a padlock including a housing having first and second holes facing in the same direction at the top of the housing, a shackle including a root section (at the left side of fig. 1) and a free section at the right side of Fig. 1, the free section disposed outside of the housing and rotatable about the root section between locked and unlocked positions, a confining block having a block portion 4 located outside of the housing in Fig. 1 and a stem portion directly below the block portion located inside the housing in the second, rightmost hole of the housing, the block portion having a receptacle outside of the housing with a first opening defined in the top of the block portion for receiving the free section of the shackle, the block portion together with the stem portion being rotatable with respect to the housing, and cooperable with a locking mechanism 5 disposed in the housing. The CN reference



teaches the receptacle of the block portion having a second opening (at the left side as seen in fig. 1), the second opening being in communication with the first opening at the top of the block portion. The second opening of the block portion being rotatable to allow or prohibit the free section of the shackle from rotation about the root section of the shackle. Fig. 1 of the CN reference does not teach the housing having a notch in a corner thereof for receiving the block portion, and a wall facing the notch. Taylor et al (256) teaches a block portion 96 received within a notch in a corner of the housing, including a wall facing the notch, as seen at the left side of Fig. 7. It would have been obvious to modify Fig. 1 of the CN reference to include a notch in a corner of the housing for receiving the block portion 4, including a wall facing the notch, in view of the teaching of Taylor et al, to aid in the prevention of tampering with the block portion and free end of the shackle.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over the CN 2041340U reference in view of either Taylor et al as applied to claim 38 above, and further in view of Lai (672).

The CN reference also teaches combination lock wheels 2 at the left side of the housing in Fig. 1. As seen in Fig. 2, Lai teaches a numeral wheel set below the root section 33 of the shackle, including a shaft 34 diagonally opposite to the free section 31 of the shackle, a plurality of inner sleeves 23 mounted around the shaft 34, and a plurality of digit-wheels 24 mounted around the inner sleeves 23. It would have been obvious to modify the combination lock wheels 2 of the CN reference to include a shaft, inner

sleeves and digit-wheels, in view of the teaching of Lai, to provide expected locking and unlocking results of the shackle.

Applicant's arguments filed January 14, 2011 have been fully considered but they are not persuasive. At the top of page 8 of the remarks, it is argued that the Fig. 1 and Fig. 4 embodiments of the CN reference include pins 4 having different constructions. It is respectfully submitted that the teachings of the two embodiments of the CN reference are properly relied upon in the rejections of the claims. In particular, even though the pin 4 of the Fig. 4 embodiment functions in a different manner, its teaching of a notch in the corner of the housing is still properly relied upon to provide a notch in the Fig. 1 embodiment.

In response to the remarks on page 8, the first and second full paragraphs, it is noted that the claims are silent as to any particular "tampering prevention" or "guard" structural limitations, and a pleasant appearance would also meet the structural limitation that is claimed towards the notch.

With respect to the remarks on page 9, the first and second full paragraphs, it is further submitted that providing a notch in the Fig. 1 embodiment as taught by the Fig. 4 embodiment would not result in a drastic change in the configuration of the lock of Fig. 1 of the CN reference, and the embodiments as combined would provide the claimed second opening of the block portion as facing the wall of the housing.

In response to the arguments in the last two paragraphs of page 10 and the first paragraph on page 11, it is noted that Fig. 1 of the CN reference is being relied upon as teaching the claimed rotatable receptacle.

With respect to the remarks on page 11, it is unclear what is meant by "shares joint inventors" with the pending application. It is suggested that a Declaration from the inventors clarify the inventorship of the Columbia reference and the pending application.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The newly cited additional prior art teaches other padlocks having a notch in the housing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lloyd A. Gall/

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Primary Examiner, Art Unit 3673

/L. A. G./  
Primary Examiner, Art Unit 3673  
March 22, 2011